

APPLICATION FOR DRILLING
MESA PETROLEUM CO.
DERRICK FEDERAL COM #1
2160' FNL & 1980' FWL
Lot 11, Sec 5, T 16S, R28E
LEASE: NM-33277
October 10, 1979

In conjunction with permitting subject well for drilling in Section 5, Township 16 South, Range 28 East, Eddy County, New Mexico, Mesa Petroleum Co submits the following:

1. The geologic surface formation series is Guadalupian Artesia Group.
2. The estimated tops of geologic markers are as follows:

QUEEN	1002
SAN ANDRES	1762
GLORIETTA	2947
TUBB	4477
ABO	5257
WOLFCAMP	6492
BURSUM	7402
STRAWN	8462
ATOKA	8762
MORROW	8982
MISS CHESTER SH	9177
MISS CHESTER LM	9277
MISS MERAMEC OSAGE	9407

3. The depth at which water, oil, or gas are expected is:

WATER	3020
WATER	3520
WATER	4530
GAS & WATER	7660
GAS-LOWER PENN	8470
GAS-LOWER PENN	8770
GAS-MORROW	8990

4. Casing and Blowout Preventer Program:

Surface: 350' of 13-3/8" 48#, H-40, ST&C new casing cemented with 400 sx Class "H" with 1/4# flocele and 2% CaCl or sufficient volume to circulate cement to surface. Will install 10" API 3000 psi WP bradenhead and nipple up 10" API 3000 WP ram type BOPs to drill 11" intermediate hole.

Intermediate: 1900' of 8-5/8" 24#, K-55, ST&C new casing cemented with 775 sx LW with 5# gilsonite, 1/4# flocele and 2% CaCl followed by 325 sx Class "C" with 2% CaCl or sufficient volume to circulate cement to bottom of surface casing. Will nipple up 12" API 3000 WP x 10" API 3000 WP casinghead spool and install 10" API 3000 psi WP BOP stack (consisting of 1 pipe ram, 1 blind ram, 1 bag type BOP) to drill 7-7/8" production hole.